

Application No.: 10/663,432Docket No.: 4618-002

### REMARKS

Applicants appreciate the Examiner's thorough review of the present application, and respectfully request reconsideration in light of the preceding amendments and the following remarks.

Claims 2-4 and 6-22 are pending in the application. Claims 1 and 5 have been cancelled without prejudice or disclaimer. Claim 4 has been rewritten in independent form. Claims 2 and 3 have been amended to depend from claim 4. New claims 6-22 have been added to provide Applicants with the scope of protection to which they are believed entitled. New claims 6-22 find solid support in the original specification, e.g., at page 9, lines 19-21; page 11, lines 12-13; page 13, line 15; page 14, lines 14-21; page 15, lines 16-19 and 23-25; and page 16, lines 4-10, as well as the original drawings, e.g., at FIGs. 2-5. No new matter has been introduced through the foregoing amendments.

The 35 U.S.C. 112, *second paragraph* rejection of claims 1 and 5 is moot because claims 1 and 5 have been cancelled. Claims 2-4 have been amended and new claims 6-22 have been drafted to be free of indefiniteness issues within the meaning of 35 U.S.C. 112, *second paragraph*.

The 35 U.S.C. 103(a) rejections of claims 1-5 as being obvious over *Suzuki* (EP 0 841 156) and/or *Butterworth* (U.S. Patent No. 4,081,582) are noted. Applicants respectfully traverse the obviousness rejections of, at least, claim 4, which has been rewritten in independent form, because the Examiner has failed to follow proper USPTO practice and procedure.

"Office policy is to follow *Graham v. John Deere Co.* in the consideration and determination of obviousness under 35 U.S.C. 103.... [T]he four factual inquiries enunciated therein as a background for determining obviousness are as follows:

- (A) Determining the scope and contents of the prior art;
- (B) Ascertaining the differences between the prior art and the claims in issue;

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- (C) Resolving the level of ordinary skill in the pertinent art; and
- (D) Evaluating evidence of secondary considerations." See *MPEP*, section 2141.

In the rejections of claim 4, the Examiner has failed to provide at least an analysis under requirement (B). The obviousness rejections of claim 4 are therefore inappropriate and should be withdrawn or rephrased.

The Examiner's statement regarding the alleged impossibility of determining the scope of claim 4 is noted. However, this is not a proper argument under 35 U.S.C. 103(a). If the Examiner is of the opinion that the scope of claim 4 is unascertainable to a person of ordinary skill in the art, she should formulate her rejection under other applicable provisions of patent law, rather than under 35 U.S.C. 103(a).

Withdrawal of the obviousness rejections of claim 4 is now deemed appropriate and therefore respectfully requested.

Of particular note, Applicants respectfully submit that the density of each of the first and second layers is positively recited in claim 4. It should be noted that the problem of undesirable return of body liquids typically occurs under pressure, particularly when an absorbent article is compressed under the weight of a wearer, e.g., in a sitting position, and the fiber densities of the first and second layers may vary considerably when the first and second layers are compressed under the weight of a wearer. Moreover, the ability of preventing liquid return depends on the fiber densities when the first and second layers are in a compressed state where a considerable pressure is exerted thereon, rather than in a natural state where no pressure is exerted thereon. The pressure of 4.9 kPa is applied assuming a state where the absorbent composite sheet is compressed under the weight of a wearer in a sitting position (though not stated in the specification as originally filed). Thus, applicants believe that the density of each layer is a positively claimed in original claim 4. The scope of claim 4 is thus ascertainable to a person of ordinary skill in the art, contrary to the

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Examiner's allegation.

Finally, since the applied references do not fairly teach or suggest the claimed limitation of claim 4, claim 4 is patentable over the applied art of record.

Claims 2-3 and 6-13 depend from claim 4, and are considered patentable at least for the reason advanced with respect to claim 4. The dependent claims are also patentable on their own merits since these claims recite other features of the invention neither disclosed, taught nor suggested by the applied art.

For example, as to claim 6, the applied references do not fairly teach or suggest that the difference in fiber density between said first layer and said second layer is greater than or equal to 0.05 g/cm<sup>3</sup>.

As to claim 11, the applied references do not fairly teach or suggest that the first layer is free of said cellulose type fibers of said second layer, except at an interface between said first and second layers (claim 9) and the top surface of said first layer and a bottom surface of said second layer respectively define opposite surfaces of said composite sheet, said opposite surfaces are generally planar except in embossed regions where the fused bonds between the thermoplastic synthetic resin fibers of said first and second layers are located (claim 11). *Suzuki* appears to teach that the first layer is free of said cellulose type fibers of said second layer in FIGs. 13, 16, 17, 18, 23, 30, and 31. However, the composite sheets disclosed in the listed figures do not include generally planar surfaces due to the wave-shaped surface of the first layer. See also page 10, lines 49-56 of *Suzuki*. Thus, *Suzuki* fails to anticipate or render obvious claim 11. In addition, *Butterworth* does not teach or suggest the claimed embossed regions where the fused bonds are located because the reference requires that the heat treatment be performed without pressure. See, for example, the Abstract and column 3, lines 1-10 of *Butterworth*. Thus, *Butterworth* fails to anticipate or render obvious claim 11.

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As to claim 12, the applied references do not fairly teach or suggest that the first layer is free of said cellulose type fibers of said second layer, except at an interface between said first and second layers (claim 9), said composite sheet has opposite, generally planar and parallel surfaces defined by the top surface of said first layer and a bottom surface of said second layer, respectively, and said second layer defines a primary absorbent body of said absorbent article. As discussed above, *Suzuki* does not fairly teach or suggest the two former limitations. *Butterworth* does not teach or suggest the latter limitation, because, the composite sheet of *Butterworth* is used only as a topsheet in the diaper shown in FIG. 13. The primary absorbent core in the FIG. 13 embodiment of *Butterworth* is 94, rather than the composite sheet 92. Thus, *Suzuki* and *Butterworth* fail to anticipate or render obvious claim 12.

As to claim 13, the applied references do not fairly teach or suggest that said second layer defines a primary absorbent body of said absorbent article the first layer has a portion that extends outwardly beyond a boundary of said second layer and is bonded to the back sheet. *Butterworth* fails to teach or suggest the former highlighted claim feature, as discussed above. All relevant embodiments of *Suzuki* do not include the latter highlighted claim feature, because as seen in, for example, FIGs. 13, 16, 17, 18, 23, 30, and 31, both layers of the *Suzuki* composite sheet are co-extensive.

New independent claim 14 is directed to an absorbent composite sheet, comprising: a first, fibrous layer on a liquid receiving side of the composite sheet and a second, fibrous layer stacked below said first layer; said first layer being a first non-woven fabric comprising thermoplastic synthetic resin fibers which are hydrophobic and heat bonded together to define said first non-woven fabric; said second layer being a second non-woven fabric comprising hydrophilic fibers mechanically entangled with thermoplastic synthetic resin fibers; said first layer and said second layer being joined by fused bonds between the thermoplastic synthetic resin fibers of said first layer and the thermoplastic synthetic resin fibers of said second layer, and the absorbent composite sheet

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further comprising gaps between the thermoplastic synthetic resin fibers of said first layer for transferring a liquid from a top surface of said first layer to said second layer through said gaps; wherein the first layer is free of said hydrophilic fibers of said second layer, except at an interface between said first and second layers; and said composite sheet has opposite, generally planar and parallel surfaces defined by the top surface of said first layer and a bottom surface of said second layer, respectively. New independent claim 14 is patentable over the applied references, because *Butterworth* fails to teach or suggest the first highlighted limitation, whereas *Suzuki* does not fairly teach or suggest the second and third highlighted limitations as argued with respect to claim 11. *Butterworth* fails to teach or suggest the first layer being a first non-woven fabric comprising thermoplastic synthetic resin fibers which are hydrophobic and heat bonded together to define said first non-woven fabric, because the reference's corresponding element, i.e., the second layer, comprises irregularly arranged, intersecting, overlapping, mechanically inter-engaged, loosely assembled synthetic wood pulp fibers which are not disclosed or suggested to be heat bonded together. Thus, *Suzuki* and *Butterworth* fail to anticipate or render obvious claim 14.

Claims 15-22 depend from claim 14, and are considered patentable at least for the reason advanced with respect to claim 14. Claims 15-22 are also patentable on their own merits since these claims recite other features of the invention neither disclosed, taught nor suggested by the applied art.

For example, as to claim 15, the applied references do not appear to fairly teach or suggest that the fiber density of said first layer is higher than that of said second layer.

As to claims 16-19, the applied references do not appear to fairly teach or suggest that thermoplastic synthetic resin fibers of said first layer has a fineness lower than that of the thermoplastic synthetic resin fibers of said second layer.

As to claim 18, the applied references do not appear to fairly teach or suggest that the

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opposite surfaces of said composite sheet are generally planar except in embossed regions where the fused bonds between the thermoplastic synthetic resin fibers of said first and second layers are located, as argued above with respect to claim 11.

As to claim 20, the applied references do not appear to fairly teach or suggest that said first layer further comprises a surface active agent rendering the hydrophobic thermoplastic synthetic resin fibers of said first layer hydrophilic, and said hydrophilic fibers of said second layer are cellulosic fibers. *Suzuki* teaches, at best, hydrophilic treatment of the second layer, rather than the first layer as presently claimed. See page 8, lines 24-25 of *Suzuki*.

As to claim 21, the applied references do not appear to fairly teach or suggest that the second layer defines a primary absorbent body of said absorbent article and has a greatest liquid retaining capability among all components of said absorbent article, as argued above with respect to claim 12.

As to claim 22, the applied references do not appear to fairly teach or suggest that the first layer has a portion that extends outwardly beyond a boundary of said second layer and is bonded to the back sheet, as argued above with respect to claim 13.

Each of the Examiner's rejections has been traversed. Accordingly, Applicants respectfully submit that all claims are now in condition for allowance. Early and favorable indication of allowance is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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